



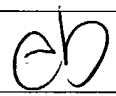
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,356	11/19/2001	Manjit Chowdhary	ECO530/4-2DIVUS	4178
22892	7590	04/02/2004	EXAMINER	
VINSON & ELKINS L.L.P. 1001 FANNIN STREET 2300 FIRST CITY TOWER HOUSTON, TX 77002-6760			TUCKER, PHILIP C	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/991,356	Applicant(s) CHOWDHARY ET AL.	
	Examiner Philip C Tucker	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/5/04
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
2. Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to teach that the particle size is substantially unaffected by extruding, which means that they may increase or decrease up to about 49% in size (see Bliss Co. Vs. Cold Metal 122 USPQ 238 where substantial is defined as greater than 49%). Applicants specification teaches on page 4, "without any corresponding change in size", and on page 7, "without affecting particle size". The amendment thus adds new matter to the claims, since such is not supported by the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2 and 5-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutenberg et al. (4269975).

Rutenberg teaches a method of preparing a ground guar which is made from hydrated guar splits (see abstract). Rutenberg teaches that extruding the guar, prior to grinding results in a gum which produces increased viscosity products (see Example II).

Rutenberg also teaches that flaking of the guar prior to grinding, results in a product with higher viscosity than nonflaked guar (column 7, lines 4-20). Moisture content and mesh size which are the same as the present invention are disclosed at column 4, lines 1-4 and lines 44-49. The final particle size is obtained through grinding and sifting through the same 100 mesh as in the present invention, thus the particle size is unaffected by extruding. Rutenberg differs from the present invention in that the use of both flaking and extruding, in the preparation of the ground guar is not disclosed. The courts have held, such as In re Crockett 126 USPQ 186, that combining such methods would not be patentable, since it would logically flow that the combination would produce the same effect, and would supplement each other. It would thus be obvious to one of ordinary skill in the art to utilize both extruding and flaking of the guar, in the process of making ground guar, given the teaching of Rutenberg that extruding and flaking produce

superior ground guar from guar splits, than guar not subject to extruding or flaking.

Rutenberg also differs in not specifying an extruding barrel of 2 - 8 inches. The utility of barrels of differing size, in order to optimize the processing of the guar would be an obvious variation to one of ordinary skill in the art (In re Rose 105 USPQ 237).

Although Rutenberg does not teach the hydration rate properties at specific

temperatures disclosed in claims 11-15, the mere discovery of a property of an obvious composition has been held to not alone render patentability by the courts. In re Dillon

16 USPQ2d 1897 states but discovery that claimed composition possesses property not disclosed for prior art does not alone defeat a prima facie case, and it is not necessary, in order to establish prima facie case, to show both structural similarity between claimed

and prior art compound and suggestion in, or expectation from, prior art that claimed compound will have the same or similar utility as one newly discovered by applicant. Thus applicants mere discovery of the property of hydration rates at specific temperatures does not render patentability to the composition.

5. Claims 1, 3, 4, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutenberg et al. (4269975) in view of Dino (5646093), Harris (5990052) and Applicants specification.

Rutenberg teaches a method of preparing a ground guar which is made from hydrated guar splits (see abstract). Rutenberg teaches that extruding the guar, prior to grinding results in a gum which produces increased viscosity products (see Example II). Rutenberg also teaches that flaking of the guar prior to grinding, results in a product with higher viscosity than nonflaked guar (column 7, lines 4-20). Moisture content and mesh size which are the same as the present invention are disclosed at column 4, lines 1-4 and lines 44-49. The final particle size is obtained through grinding and sifting through the same 100 mesh as in the present invention, thus the particle size is unaffected by extruding. Rutenberg differs from the present invention in that the use of both flaking and extruding, in the preparation of the ground guar is not disclosed. The courts have held , such as In re Crockett 126 USPQ 186, that combining such methods would not be patentable, since it would logically flow that the combination would produce the same effect, and would supplement each other. It would thus be obvious to one of ordinary skill in the art to utilize both extruding and flaking of the guar, in the process of making ground guar, given the teaching of Rutenberg that extruding and flaking produce superior ground guar from guar splits, than guar not subject to extruding or flaking. Rutenberg differs in not teaching the use of chemically or genetically modified guar.

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The utility of chemically or genetically modified guar as an alternative to guar in the industrial uses disclosed by Rutenberg at column 1, lines 8-12 are well known, and would be obvious to one of ordinary skill in the art. In support of such knowledge in the art, Dino in Example 1, and Harris at column 8, lines 35-37 teach the use of guar splits to form chemically modified guar products which are used in operations such as oil well drilling and fracturing. Dino further teaches at column 2, lines 31-41 that polygalactomannans such as guar and their derivatives are well known as thickeners in fluid systems. One of ordinary skill in the art would clearly be motivated to use the derivatized guar of Dino or Harris in the process of Rutenberg to obtain the improved viscosity characteristics therein. Applicants specification at page 9, lines 15-27 clearly teach that it is known in the art to chemically modify guar gum, and genetically modify plants in order to produce the guar products, thus such variations would be obvious variations to one of ordinary skill in the art.

Although Rutenberg does not teach the hydration rate properties at specific temperatures disclosed in claims 11-15, the mere discovery of a property of an obvious composition has been held to not alone render patentability by the courts. In re Dillon 16 USPQ2d 1897 states but discovery that claimed composition possesses property not disclosed for prior art does not alone defeat a prima facie case, and it is not necessary, in order to establish prima facie case, to show both structural similarity between claimed and prior art compound and suggestion in, or expectation from, prior art that claimed compound will have the same or similar utility as one newly discovered by applicant. Thus applicants mere discovery of the property of hydration rates at specific temperatures does not render patentability to the composition.

6. Applicants have initially argued that the amendment to the claims such that the particle size is substantially unaffected by extruding distinguishes over the current claims. As noted above, such adds new matter to the claims. However, such is not distinguishing, since applicants final powder product is obtained by grinding and sieving

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through the same size mesh as taught by Rutenberg. Applicants specification is actually suggesting that particle sizes having the same size as those of the prior art would increase the hydration rate, not that the extruding step is special in producing the same particle size (see applicants specification at page 4, lines 6-11). With respect to applicant's arguments that the combination of flaking and extruding is not obvious over Rutenberg, although Rutenberg differs from the present invention in that the use of both flaking and extruding, in the preparation of the ground guar is not disclosed in a single process, the courts have held, such as in In re Crockett 126 USPQ 186, that combining such methods would not be patentable, since it would logically flow that the combination would produce the same effect, and would supplement each other. One of ordinary skill in the art would expect that the extruding and flaking would have a cumulative effect. Contrary to applicant's assertion the flaking and extruding elements are clearly disclosed, and they are linked in view of the cited case law. A clear prima facie case has thus been made. Since both steps taught by Rutenberg are used to increase the viscosity of fluids containing the guar, the combination of such steps would be obvious to one of ordinary skill in the art in view of Crockett. Once a prima facie case of obviousness has been established, the burden shifts to the applicant to come forward with evidence to distinguish the invention (In re Biasecki 223 USPQ 785, In re Thorpe 227 USPQ 964). Applicant has not shown any superior and unexpected results from the teachings of the specification, an affidavit or declaration to show that the properties of the present product are superior and unexpected, over the properties of

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the extruded product of Rutenberg, which could render the teachings therein nonobvious. Applicant has only shown in the specification that nonextruded and nonflaked guar has inferior hydration properties to the guar of the present invention. Applicant's specification seems to indicate that the improvement achieved by the present process is by the step of extrusion. As such, a showing of superior and unexpected results would be necessary, to indicate that some unexpected or synergistic effect results from both steps of extrusion and flaking, compared to the extruded product of Rutenberg.

Applicant has argued that Rutenberg teaches away from the present invention, since Rutenberg teaches that the extruding step results in a superior product than the flaking step. However, Rutenberg does not disclose that the flaking and extruding are mutually exclusive, that detrimental effects would occur in combining the flaking and extruding steps, or that one process cannot be used in combination with the other. As such Rutenberg cannot be seen as teaching away from the combination of flaking and extruding. Clearly one of ordinary skill in the art would be motivated to take advantage of the cumulative effects of improved viscosity afforded by flaking and extruding, as taught by Rutenberg, over the nonflaked and nonextruded guar, instead of being led away by the teachings therein.

Applicant has argued that there is no motivation to modify the references. However, applicant has not given any reasons why such combination is improper. Applicants own specification at page 9, lines 15-27 indicates that one of ordinary skill in the art would clearly modify guar gums for use in the applications taught therein. Such

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is inclusive of well treatment fluids as taught by Dino and Harris. Dino further teaches at column 2, lines 31-41 that polygalactomannans such as guar and their derivatives are well known as thickeners in fluid systems. One of ordinary skill in the art would clearly be motivated to use the derivatized guar of Dino or Harris in the process of Rutenberg to obtain the improved viscosity characteristics therein.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

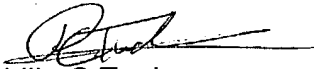
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-2980